

CLAIMS

We claim:

1 1. A system for using eye gaze to control a scroll rate
2 of information presented on a display, comprising:
3 a display for displaying scrolling information;
4 means for monitoring a gaze position on said
5 display relative to an anchor position;
6 control means for adjusting a speed of said
7 scrolling information if said gaze position deviates
8 from said anchor position.

1 2. A system for using eye gaze to control the rate of
2 information presented on a display as recited in claim
3 1 wherein said scrolling information scrolls from a
4 bottom of said display to a top of said display and
5 wherein said control means increases said scroll
6 rate if said gaze position moves below said anchor
7 position and decreases said scroll rate if said gaze
8 position moves above said anchor position.

1 3. A system for using eye gaze to control the rate of
2 information presented on a display as recited in claim
3 2 wherein said control means reverses scroll direction
4 if said gaze position moves near said top of said
5 display.

1 4. A system for using eye gaze to control the rate of
2 information presented on a display as recited in claim

3 1 wherein said scrolling information scrolls from a top
4 of said display to a bottom of said display.

1 5. A system for using eye gaze to control the rate of
2 information presented on a display as recited in claim
3 4 wherein said control means reverses scroll direction
4 if said gaze position moves near said bottom of said
5 display.

1 6. A system for using eye gaze to control the rate of
2 information presented on a display as presented in
3 claim 1 wherein said anchor position is horizontal line
4 at the center of said display.

1 7. A system for using eye gaze to control the rate of
2 information presented on a display as recited in claim
3 1 wherein said scrolling information scrolls
4 horizontally from a first side of said display to a
5 second side of said display.

1 8. A system for using eye gaze to control the rate of
2 information presented in a display as recited in claim
3 7 wherein said anchor position is a vertical line at a
4 center of said display.

1 9. A system for using eye gaze to control the rate of
2 information presented in a display as recited in claim
3 1 wherein said control means dynamically adjusts said
4 anchor position to the position of gaze dwell.

1 10. A system for using eye gaze to control the rate of
2 information presented in a display as recited in claim
3 7 wherein said control means reverses scroll direction
4 if said gaze position moves near said second side of
5 said display.

1 11. A method for automatically adjusting a scroll rate
2 of information scrolling on a display, comprising the
3 steps of:
4 defining an initial anchor position near a center
5 line of a display;
6 scrolling information across said display at a
7 scroll rate with new information appearing at a first
8 side of said display and disappearing at a second side
9 of said display;
10 tracking a gaze position on said display;
11 increasing said scroll rate if said gaze position
12 moves from said anchor position toward said first side
13 of said display; and
14 decreasing said scroll rate if said gaze position
15 moves from said anchor position toward said second side
16 of said display.

1 12. A method for automatically adjusting a scroll rate
2 of information scrolling on a display as recited in
3 claim 11 further comprising the step of:
4 reversing scroll direction if said gaze moves near
5 said second side of said display.

1 13. A method for automatically adjusting a scroll rate

2 of information scrolling on a display as recited in
3 claim 11 further comprising the step of:
4 dynamically adjusting said anchor position in
5 response to gaze dwell.

1 14. A computer readable medium comprising software
2 instructions for automatically adjusting a scroll rate
3 of information scrolling on a display, said
4 instructions comprising the steps of:
5 defining an initial anchor position near a center
6 line of a display;
7 scrolling information across said display at a
8 scroll rate with new information appearing at a first
9 side of said display and disappearing at a second side
10 of said display;
11 tracking a gaze position on said display;
12 increasing said scroll rate if said gaze position
13 moves from said anchor position toward said first side
14 of said display; and
15 decreasing said scroll rate if said gaze position
16 moves from said anchor position toward said second side
17 of said display.

1 15. A computer readable medium comprising software
2 instructions for automatically adjusting a scroll rate
3 of information scrolling on a display as recited in
4 claim 14, said instructions further comprising the
5 steps of:
6 reversing scroll direction if said gaze moves near
7 said second side of said display.

1 16. A computer readable medium comprising software
2 instructions for automatically adjusting a scroll rate
3 of information scrolling on a display as recited in
4 claim 14, said instructions further comprising the
5 steps of:
6 dynamically adjusting said anchor position in
7 response to gaze dwell.